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# **PyPrototype Documentation**

*Release 0.0.2*

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## Overview

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`PyPrototype` is a model layout for a Python project in a GitHub repository. It is planned that the project will be made available through the Python Packaging Index (PyPI) and the documentation published at ReadTheDocs.org.

To build your own Python project using this project as a template, see the section *How to use PyPrototype*.

Contents:

### 1.1 README: PyPrototype

#### prototype repository of a Python project

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**docs** <http://PyPrototype.readthedocs.org>

**git** <https://github.com/prjemian/PyPrototype.git>

**PyPI** <https://pypi.python.org/pypi/PyPrototype>

**TODO list** <https://github.com/prjemian/PyPrototype/issues>

### 1.2 How to use *PyPrototype*

-tba-

### 1.3 How to Install *PyPrototype*

The basic installation procedure:

1. install Python 2.7
2. install PyPrototype

### 1.3.1 Background

This program requires Python 2.7 (not ready for Python 3 yet) and several additional packages. Most of the package dependencies are met by using a Python distribution (provides Python, the basic package suite, and other popular packages).

The major package requirements are:

- *PyQt4* : provides the graphical user interface widgets

### 1.3.2 Python

It is suggested to use the Anaconda Python 2.7 distribution <sup>1</sup> as it contains most of the packages used by this program.

1. use a web browser and visit: <https://www.continuum.io/downloads>
2. select the distribution for your operating system
3. make sure to follow links for *Python 2.7*
4. download the installer file
5. follow the instructions to install on your computer

### 1.3.3 PyPrototype

Install this program from the Python Package Index (PyPI) using the *pip* command:

```
pip install pyRestTable
pip install --no-deps PyPrototype
```

The `--no-deps` option tells *pip* not to download and attempt to build newer versions of other required packages such as *lxml*.

It *may* be necessary to install the *lxml* package if your distribution does not already have it installed. You can view all the installed packages using this command:

```
pip list
```

The list may have dozens or more items. To install *lxml*:

```
pip install lxml
```

### Updating PyPrototype

To update to a newer version of *PyPrototype*, use this command:

```
pip install -U --no-deps PyPrototype
```

The `-U` option tells *pip* to search for and install the latest package update.

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<sup>1</sup> Anaconda Python 2.7: <https://www.continuum.io>



## Alternative Installation steps

It is possible to install **PyPrototype** using steps common to Python developers, such as:

```
pip install https://github.com/prjemian/PyPrototype
```

or:

```
git clone install https://github.com/prjemian/PyPrototype.git
cd pyprototype
python ./setup.py install
```

Working from a GitHub clone is not recommended for regular use.

## 1.4 module: main

Main code runs the command-line program.

usage:

```
python main.py [input_file]
```

`PyPrototype.main.main()`  
start the program

`PyPrototype.main.process_command_line()`  
support command-line options such as `--help` and `--version`

## 1.5 module: main\_gui

`main_gui.Main` code runs the GUI.

usage:

```
python main_gui.py [input_file]
```

`class PyPrototype.main_gui.MyGui(message, filename)`  
Bases: `PyPrototype.mock_PyQt4.QtGui.QWidget`  
Creates a Qt widget in a window

`PyPrototype.main_gui.main()`  
start the program

`PyPrototype.main_gui.process_command_line()`  
support command-line options such as `--help` and `--version`

## 1.6 History of Source Code Changes

**0.0.2** initial setup

**0.0.1** concept verbalized

## 1.7 Source Code License

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```

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